REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-23 are pending in this application. Claims 1, 10, and 17 are independent. The remaining claims depend, either directly or indirectly, from claims 1, 10, and 17.

Claim Amendments

Independent claims 1, 10, and 17 are amended to clarify aspects of the invention. Further, claims 11 and 12 are amended for consistency with the amendments to claim 10. No new matter has been introduced by way of these amendments as support for these amendments may be found, for example, in paragraphs [0024], [0026], [0042], and [0046] and FIG. 2 of the Instant Specification.

Rejections under 35 U.S.C. § 103

Claims 1-23 stand rejected under 35 U.S.C. § 103 (a) as being obvious over U.S. Patent No. 6,663,356 ("Edwards") in view of U.S. Patent Publication No. 2004/0205720 ("Hundt"). To the extent that this rejection may still apply to the amending and original claims, the rejection is respectfully traversed.

MPEP § 2143 states that "[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The

Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit." Further, when combining prior art elements, the Examiner "must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference; ..." MPEP § 2143(A).

<u>Prior Art fails to teach or suggest "obtaining a value of an implementation data structure from an instrumented program during execution of the instrumented program, wherein the instrumented program is compiled code comprising the implementation data structure" and "translating the value of the implementation data structure using the translator to obtain translated data of an interface data structure."</u>

Amended independent claim 1 recites, in part, "obtaining a value of an implementation data structure from an instrumented program during execution of the instrumented program, wherein the instrumented program is compiled code comprising the implementation data structure" and "translating the value of the implementation data structure using the translator to obtain translated data of an interface data structure." In other words, amended independent claim 1 requires, in part, obtaining a *value* from *executing* compiled code and subsequently translating the *value* from the form of an implementation data structure that is *internal* to the compiled code to the form of an interface data structure. *See e.g.,* Instant Specification, paragraph [0019] & [0026].

In contrast, Edwards teaches that *instructions* in an intermediate representation (IR) of an executable (*i.e.,* compiled code) may be translated into platform specific instructions. *See* Edwards, column 8, line 64 to column 9, line 3. In other words, the system of Edwards provides for the translation of compiled code itself to obtain a platform-specific executable. *See id.* Further, the

translating of Edwards cannot occur on data obtained during execution of the platform-specific executable as the translating disclosed in Edwards is to *generate* the platform-specific executable. Thus, Edwards fails to disclose obtaining a value during the execution of the platform-specific executable and subsequently translating the *value* from the form of an implementation data structure that is internal to the platform-specific executable. In view of this, Edwards fails to teach or suggest obtaining a *value* from *executing* compiled code and subsequently translating the *value* from the form of an implementation data structure that is *internal* to the compiled code to the form of an interface data structure as specified in amended independent claim 1.

Hundt fails to provide that which Edwards lacks. More specifically, Hundt teaches using an instrumentor that allows the user to *add debugging code* to the execution of a program. *See* Hundt, abstract. In other words, the instrumentor of Hundt allows the user to modify *program* code (*i.e.*, instructions) of a target program to include debugging code. *See* Hundt, paragraph [0009]. However, Hundt cannot disclose translating a value in the form of an internal implementation data structure because the instrumentor already has access to the program code itself. Thus, any values in the form of data structures internal to the program code could be directly accessed and used by the instrumentor of Hundt without requiring a translation. *See* Hundt, paragraph [0039] (describing how the debugging code accesses variables of the program). In view of this, Hundt fails to teach or suggest obtaining a *value* from *executing* compiled code and subsequently translating the *value* from the form of an implementation data structure that is *internal* to the compiled code to the form of an interface data structure as specified in amended independent claim 1.

Prior Art fails to teach or suggest "in response to an instrumentation request from a user, providing the translated data to the user to satisfy the instrumentation request, wherein the instrumentation request is a request to perform a function of one of a group consisting of a tracing program and a debugging program."

Amended independent claim 1 recites, in part, "in response to an instrumentation request from a user, providing the translated data to the user to satisfy the instrumentation request, wherein the instrumentation request is a request to perform a function of one of a group consisting of a tracing program and a debugging program." In other words, amended independent claim 1 requires, in part, providing translated data to a user in response to an instrumentation request for a tracing program or a debugging program. *See e.g.,* Instant Specification, paragraph [0019].

The Examiner admits that that Edwards fails to "explicitly describe that the instrumentation request is a request to perform a function of one of a group consisting of a tracing program and a debugging program." *See* Office Action dated November 13, 2008, page 4. Thus, Edwards cannot teach providing translated data to a user to satisfy an instrumentation request for a tracing program or a debugging program. In view of this, Edwards fails to teach or suggest providing *translated* data to a user in response to an instrumentation request for a tracing program or a debugging program as specified in amended independent claim 1.

Hundt fails to provide that which Edwards lacks. As discussed above, Hundt teaches allowing the user to modify *program* code (*i.e.,* instructions) of a target program to include debugging code. *See* Hundt, paragraph [0009]. Thus, the debugging code of Hundt has access to the internal data structures of the target program and may provide debugging data directly to the user without translation. *See* Hundt, paragraph [0039]. In other words, the debugger of Hundt provides debugging data directly to the user using the internal data structure of the program. *See* Hundt, paragraph [0009] (describing how the debugging code is added as an executable part of the

program). From this it logically follows that Hundt does not teach or suggest any translation as such functionality is not required by the invention described in Hundt. Further, a review of Hundt reveals that Hundt is silent with respect to any translation, thereby confirming the above. Accordingly, Hundt fails to teach or suggest providing *translated* data to a user in response to an instrumentation request for a tracing program or a debugging program as specified in amended independent claim 1.

In view of the above, Edwards and Hundt, whether considered separately or in combination, do not teach or suggest all the limitations of amended independent claim 1. Thus, amended independent claim 1 is patentable over Edwards and Hundt. Amended independent claims 10 and 17 include substantially similar limitations as amended independent claim 1 and, thus, are patentable over Edwards and Hundt for at least the same reasons as amended independent claim 1. Dependent claims 2-9, 11-16, and 18-23 depend, directly or indirectly, from claims 1, 10, and 17 and are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03226/343001).

Dated: February 12, 2009   Respectfully submitted,

By___ /Robert P. Lord/_____
    Robert P. Lord
    Registration No.: 46,479
    OSHA · LIANG LLP
    909 Fannin Street, Suite 3500
    Houston, Texas 77010
    (713) 228-8600
    (713) 228-8778 (Fax)
    Attorney for Applicant